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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,557	11/21/2003	Ronald P. Swanson	58710US002	3559
32692	7590	07/18/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			KIM, SANG K	
			ART UNIT	PAPER NUMBER

3654

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,557

Applicant(s)

SWANSON ET AL.

Examiner

SANG KIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-19 and 30-40 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 20-29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/24, 12/13/04, 4/4/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "51" has been used to designate both "axis" and "bracket" as shown in figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 7-10, 30-40 are objected to because of the following informalities:

In claim 30:

Line 21, "the flexure plate" should be --the flexure plates--;

Line 22, "a midpoint of an entrance tangent line" should be --said midpoint of said entrance tangent line--.

In claim 7:

Line 21, "an entrance tangent line" should be --the entrance tangent line--.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites the limitation "the first frame roller" in lines 13-14. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 30-32 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin, U.S. Patent No. 3615048.

With respect to claim 1, Martin '048 teaches a method of using the apparatus as shown in figures 1-9. A first positioning guide (i.e., using a first roller 12 which in the prior art sensing means were attached to, see column 2, lines 14-24) proximate a second positioning guide (14 with sensing means), applicant's specification notes the first web guide and second web guide is not critical which can be disposed in close

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proximity with minimal or no intermediate processing of the web such as using the idle roller 12, see page 5, lines 6-13; passing the web through the first positioning guide to reduce angular and transverse position errors; passing the web through the second positioning guide (14), wherein the second positioning guide positions the moving web with a mechanism having zero-backlash (i.e., using a controller and a motor, see column 2, lines 25-49); sensing a transverse location of the moving web at the second positioning guide with a sensor (62, 64); transmitting the transverse location of the web at the second positioning guide to a controller (102); and manipulating a zero-backlash actuator (using a motor 106, 54) with the controller, wherein the zero-backlash actuator is coupled to the second positioning guide such that the transverse position of the web is controllable to select the position, see figures 1-9.

With respect to claims 2-4, Martin '048 recognizes the required limit of accuracy is as plus or minus .005 inches, see column 1, lines 65-70.

With respect to claim 6, Martin '048 shows a plurality of flexure plates (78, 80), see figure 1.

With respect to claim 30, Martin '048 teaches an apparatus for web guide (10) comprising: a base (not shown, i.e., the apparatus is supported by the base since the device cannot float in the air by itself) comprising a first base roller (50) and a second base roller (52), wherein an axis of the first base roller is substantially parallel to an axis of the second base roller, see figure 1; a frame (70) comprising at least one frame roller (12 or 14); a plurality of flexure plates (78, 80) attaching the frame (70) to the base, wherein the plurality of flexure plates are positioned in selected positions such that the

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frame rotates about a midpoint (90) of an entrance tangent line (near 14) of the web with said at least one frame roller (14); a sensor (62, 64) determines a transverse position of the web; a controller (102) communicating with the sensor, wherein the control determines the error of the transverse position of the web from a selected transverse position, see figure 9; a position device (106, 54) communicating with the controller, wherein the positioning device is mounted to the base; and a flexible bracket (60) coupling the frame and the positioning device, wherein the positioning device provides a force to the frame through the flexure plates (78, 80) such that the frame rotates about said midpoint (80) of said entrance tangent line of the web with the first frame roller (14), to adjust the transverse position of the web, see figures 1-9.

With respect to claim 31, Martin '048 shows a first frame roller (12); and a second frame roller (14), wherein an axis (22) of the first frame roller is substantially parallel to an axis (24) of the second frame roller, see figure 1.

With respect to claim 32, Martin '048 teaches using the apparatus using the position device (106) with an actuator (54) (i.e., a motor and a controller) to eliminate backlash, see column 2, lines 14-52.

With respect to claim 36, Martin '048 shows a path at an entrance span (near 12) and an exit span (near 14) are substantially perpendicular to a plate of rotation to the frame.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 11-19 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin, U.S. Patent No. 3615048.

With respect to claims 15-16, as noted above, Martin '048 disclosed the claimed invention except for the first positioning guide with a feedback control system independent from the second control system. It would have been obvious to one having ordinary skill in the art at the time the invention was made to attach an independent feedback control system of the second positioning guide onto the first positioning guide, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. Furthermore, as noted above, Martin '048 recognizes in the prior art that sensing means were attached to the first positioning guide 12, see column 2, lines 14-24.

With respect to claims 11-14, 33 and 37-40, Martin '048 discloses the claimed invention except for using a certain type of controller and sensor with a certain hertz. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the size ranges using a certain type of controller and sensor specified in the claims when guiding the web of Martin '048, it being well known in the art to select a certain hertz to use the controller and sensor to correspond to the nature of the material being guided. It would have been well within the level of skill of one

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skilled in the art to select the claimed dimensions based on considerations such as the material, using a certain type of controller or sensor, etc.

With respect to claims 5, 17-19, 34 and 35, Martin '048 discloses the claimed invention except for a distance between the last frame roller (14) and the second base roller (52) is less than about one-half or one-tenth of a web width. It would have been obvious to one having ordinary skill in the art at the time the invention was to select a distance between these two rollers as specified in the claims when guiding the web of Martin '048, it being well known in the art to select a certain distance between these two rollers to correspond to the nature of the material being guided. It would have been well within the level of skill of one skilled in the art to select a distance between these rollers based on considerations such as the material, the web traveling distance, etc.

Allowable Subject Matter

Claims 7-10 and 20-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG KIM whose telephone number is 571-272-6947.

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The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki, can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SK

7/9/05



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